



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,636	10/26/2001	Robert Brondijk	206	1426

31665 7590 03/21/2005

PATENT DEPARTMENT
MACROVISION CORPORATION
2830 DE LA CRUZ BLVD.
SANTA CLARA, CA 95050

EXAMINER

PERUNGA VOOR, VENKATANARAY

ART UNIT	PAPER NUMBER
----------	--------------

2132

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/014,636	Applicant(s) BRONDIJK ET AL.	
	Examiner Venkatanarayanan Perungavoor	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2001.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-80 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 10/26/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). Misnumbered claim 66-81 been renumbered 65-80. Appropriate correction required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1-7,9-34, 36-39, 41-54, 56-80 rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,571,220 B1 to Ogino et al.

4. Regarding Claim 1,

A system for material, comprising:
providing protected copying of preprocessing unit having an output and capable of providing copy-once functionality on a material before providing said material on said output[Col 6 Line 52-67]; and
recording unit coupled to said preprocessing unit output, and capable of searching for a copy-never indication in said material provided on said preprocessing unit output and copying said material unless said copy-never indication is found, but lacking capability to remark said material with a copy-no-more indication[Col 6 Line 39-51].

5. Regarding Claim 2, Ogino et al. discloses copy-never watermark is embedded within the material see Column 6 Line 23-33.

6. Regarding Claim 3, Ogino et al. discloses the remarking of material when "copy-no-more" and "one copy" is found and not remarking when "never copy" is found see Column 6 Line 23-38 & Column 6 Line 8-15.

7. Regarding Claim 4 and 5, Ogino et al. discloses the copy-one and copy-no-more watermark embedded within the material see Column 6 Line 8-15.

8. Regarding Claim 6 and 7, Ogino et al. discloses the secure channel and checking of watermark information and also of key exchange see Column 6 Line 58-67.

9. Regarding Claim 9, Ogino et al. discloses the searching for watermarks that represent "copy-once" see Column 12 Line 11-29.

10. Regarding Claim 10 and 12, Ogino et al. discloses the step of finding the copy-once watermark after establishing secure channel see Col 14 Line 53-60.

11. Regarding Claim 11, Ogino et al. disclose the step establishing secure connection before finding watermarks see Column 6 Line 52-64.

12. Regarding Claim 13, Ogino et al. discloses the preprocessing unit acting as though it had found the copy-once indication see Column 6 Line 39-51.

13. Regarding Claim 14, Ogino et al. disclose the audio-visual content see Col 8 Line 29-40.

14. Regarding Claim 15,16, 17 and 18, The "preprocessing unit personal computer is included on an expansion board of a personal computer" is met by Ogino et al. Col 15 Line 53-65

15. Regarding Claim 19, The "network appliance coupled to a recording unit" is met by Ogino et al. see Column 14 Line 57-60.

16. Regarding Claim 20, The "preprocessing unit is included in a set-top box coupled to said recording unit" is disclosed by Ogino et al. see Column 7 Line 24-37.

17. Regarding Claim 21, Ogino disclose DVD recordable drive see Column 6 Line 15-21.

18. Regarding Claim 22,

A method implemented in a recording unit for providing protected copying of material, comprising:
detecting if a copy-never or copy-once indication is provided with a material; [Col 6 Line 8-15]
if said copy-never indication is detected, then not allowing copying of said material;[Col 6 Line 45-51]

Art Unit: 2132

if neither said copy-never nor said copy-once indication is detected, then allowing copying of said material; [Col 12 Line 11-18]

and if said copy-once indication is detected, then transmitting information of said detection of said copy-once indication back to a sender of said material provided a secure channel is established with said sender, otherwise not allowing copying of said material[Col 12 Line 19-29].

19. Claim 23 is rejected under the same rationale as Claim 14 above.

20. Claim 24 is rejected under the same rationale as Claim 2 above.

21. Claim 25 is rejected under the same rationale as Claim 4 above.

22. Claim 26 is rejected under the same rationale as Claim 21 above.

23. Claim 27 is rejected under the same rationale as Claim 15 above.

24. Claim 28 is rejected under the same rationale as Claim 16 above.

25. Claim 29 is rejected under the same rationale as Claim 17 above.

26. Claim 30 is rejected under the same rationale as Claim 19 above.

27. Claim 31 is rejected under the same rationale as Claim 20 above.

28. Regarding Claim 32, The "method according to claim 22, wherein said transmitting information of said detection of said copy-once indication back to a sender of said material provided a secure channel is established with said sender, otherwise not allowing copying of said material, comprises: if said copy-never indication is not said copy-once indication is detected, then detected and a secure channel already established with said sender of said material, then transmitting information of said detection of said copy-once indication back to said sender of said material, and

said secure channel is not already established with said sender of said material, then not allowing copying of said material” is met by Ogino et al. see Col 10 Line 53-64 & Column 9 Line 54-58.

29. Regarding Claim 33, The “method according to claim 22, wherein said transmitting information of said detection of said copy-once indication back to a sender of said material provided a secure channel is established with said sender, otherwise not allowing copying of said material, comprises: “if said copy-never indication is not detected and said copy-once indication is detected, then establishing a secure channel with said sender of said material; if said secure channel cannot be established, then not allowing copying of said material; and if said secure channel is established, then transmitting information of said detection of said copy-once indication back to said sender of said material” is met by Ogino et al. see Col 10 Line 53-64 & Column 9 Line 54-58.

30. Claim 34 is rejected under the same rationale as Claim 7 above.

31. Regarding Claim 36, 37, and 38, Ogino et al. discloses transmitting information only when allowed based on watermarks and done thorough an secure channel see Col 10 Line 53-64 & Column 9 Line 54-58.

32. Claim 39 is rejected under the same rationale as Claim 7 above.

Claim 41 is rejected under the same rationale as Claim 5 above.

33. Regarding Claim 42,

A recording unit for providing protected copying of material, comprising:
an input channel receiving a material for copying[Col 10 Line 11-18]; a primary
detector coupled to said input channel to detect a copy-never indication and a
copy-once indication are provided with said material[Col 9 Line 66-Col 10 Line 6]
; and compliance logic coupled to said primary detector and configured such that
if said copy-never indication is detected, then preventing said material from being
copied, and if neither said copy-never nor said copy-once indication is detected,
then allowing said material to be copied[Col 10 Line 47-64].

34. Claim 43 is rejected under the same rationale as Claim 14 above.

35. Claim 44 is rejected under the same rationale as Claim 2 above.

36. Claim 45 is rejected under the same rationale as Claim 4 above.

37. Claim 46 is rejected under the same rationale as Claim 21 above.

38. Claim 47 is rejected under the same rationale as Claim 15 above.

39. Claim 48 is rejected under the same rationale as Claim 16 above.

40. Claim 49 is rejected under the same rationale as Claim 17 above.

41. Claim 50 is rejected under the same rationale as Claim 19 above.

42. Claim 51 is rejected under the same rationale as Claim 20 above.

43. Claim 52 and 53 are rejected under the same rationale as Claim 32 and 33
respectively.

44. Claim 54 is rejected under the same rationale as Claim 7 above.

45. Claim 60 is rejected under the same rationale as Claim 5 above.

Art Unit: 2132

46. Regarding Claim 61,62 and 63 compliance logic being processor, state machine and logic circuit are substantially taught by Ogino et al. see Column 12 Line 42-48 & Column 11 Line 36-43.

47. Regarding Claim 64,

A system for providing protected copying of material, comprising:
a preprocessing unit having at least one input channel for receiving material and an output channel for providing an output, wherein said material is provided as said output if neither a copy-never indication nor a copy- once indication is detected as being provided with said material, said material is not provided as said output if either said copy-never indication is detected as being provided or said copy-once indication and a copy-no-more indication are both detected as being provided with said material, and an encrypted version of said material including said copy-no-more indication is provided as said output and said output channel is configured to be a secure channel said copy-once indication is detected and said copy-no-more indication is not detected prior to said inclusion with said material[Abstract & Col 11 Line 65-Col 12 Line 10]; and a recording unit coupled to said output channel of said preprocessing unit and including a primary detector to detect if a copy-never indication and a copy-once indication are provided with said preprocessing unit's output[Col 12 Line 42-48]; and compliance logic coupled to said primary detector and configured such that if said copy-never indication is detected, then not allowing said preprocessing unit's output to be copied, and if neither said copy-never nor said copy- once indication is detected, then allowing said preprocessing unit's output to be copied[Col 12 Line 11-18].

48. Regarding Claim 65, The “compliance logic is further configured such that if said copy-once indication is detected, then establishing a secure channel with said preprocessing unit and passing information of said detection of said copy-once indication back to said preprocessing unit over said secure channel” is met by Ogino et al. see Col 13 Line 53-60.

49. Regarding Claim 66, The “preprocessing unit receives said information of said detection of said copy-once indication passed back by said recording unit, and provides said encrypted version of said material including said copy-no-more indication as said output over said secure channel” is met by Ogino et al. see Column 12 Line 19-33.

50. Regarding Claim 67, The “recording unit further includes a secondary detector to detect if a copy-no-more indication is provided with said preprocessing unit output, and said compliance logic is further configured such that if said copy-once indication is detected and said copy-no-more indication is not detected, then passing information of said detection of said copy-once indication back to said preprocessing unit over said secure channel if said secure channel has already been established” is met by Ogino et al. see Column 6 Line 8-51.

51. Regarding Claim 68, The “recording unit further includes a secondary detector to detect if a copy-no-more indication is provided with said preprocessing unit output, and said compliance logic is further configured such that if said copy-once indication is detected and said copy-no-more indication is not detected, then establishing a secure channel with said preprocessing unit and passing information of said detection of said copy- once indication back to said preprocessing unit over said secure channel” is met by Ogino et al. see Column 6 Line 39-64.

52. Claim 69 is rejected under the same rationale as Claim 14 above.

- 53. Claim 70 is rejected under the same rationale as Claim 2 above.
- 54. Claim 71 is rejected under the same rationale as Claim 4 above.
- 55. Claim 72 is rejected under the same rationale as Claim 5 above.
- 56. Claim 73 is rejected under the same rationale as Claim 15 above.
- 57. Claim 74 is rejected under the same rationale as Claim 19 above.
- 58. Claim 75 is rejected under the same rationale as Claim 20 above.
- 59. Claim 76 is rejected under the same rationale as Claim 21 above.
- 60. Claim 77 is rejected under the same rationale as Claim 7 above.
- 61. Claim 78,79, and 80 is rejected under the same rationale as Claim 61, 62 and 63 above respectively.

Claim Rejections - 35 USC § 103

62. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

63. Claim 8, 35,40,55 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6571220 B1 to Ogino et al. in view of NPL¹ to Stalling

64. Ogino does not disclose the key exchange being done via Diffie-Hellman key exchange. However, Stallings discloses the use of Diffie-Hellman key exchange for use

between two communicating devices see pp 296 paragraph 2-3. It would be obvious to one having ordinary skill in the art at the time of the invention to include Diffie-Hellman in the invention of Ogino in order to use an secure key exchange as taught in Stallings¹ see pp 296 paragraph 2-3.

65. Claim 35 is rejected under the same rationale as Claim 8 above.

66. Claim 40 is rejected under the same rationale as Claim 8 above.

67. Claim 55 is rejected under the same rationale as Claim 8 above.

Conclusion

68. The following patents are cited to further show the state of art in general:

U.S. Patent 6,633,723 B1 to Kuroda et al.

U.S. Patent 6,707, 774 B1 to Kuroda et al.

U.S. Patent 6320829 B1 to Matsumoto et al.

69. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkatanarayanan Perungavoor whose telephone number is 571-272-7213. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

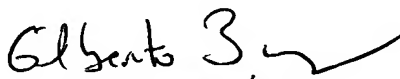
¹ See Stallings, William. "Diffie-Hellman Key Exchange". Cryptography and Network Security: Principles and Practices. Upper Saddle River, New Jersey: Prentice Hall, 2003. 293-296.

Art Unit: 2132

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Venkatanarayanan Perungavoor
Examiner
Art Unit 2132

VP
3/11/05


GILBERTO BARRON JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100